Before using your air conditioner, please read
This manual carefully and keep it for future reference along with your receipt.

INVERTER SINGLE ZONE SPLIT-TYPE AIR CONDITIONER

USER'S MANUAL

Indoor Unit : 1PAMSH09-SZW-14.5 1PAMSH12-SZW-15
1PAMSH18-SZW-15 1PAMSH22-SZW-15

Outdoor Unit : 1PAMSH09-SZO-14.5 1PAMSH12-SZO-15
1PAMSH18-SZO-15 1PAMSH22-SZO-15

Read This Manual

This manual provides the information needed for proper use and maintenance of this air conditioner. Basic preventive care can help extend the life of this unit. The “Troubleshooting Tips” contains a chart with solutions to the most common problems. Referring to this section may save time and prevent the need for a service call in the event of a problem.

CONTENTS

SAFETY PRECAUTIONS

Warning 2
Caution 3

OPERATING INSTRUCTIONS

Parts names 4
Special functions 5
Operating temperature.....6
Manual operation 6
Airflow direction control 7
How the air conditioner works 8

CARE AND MAINTENANCE

Care and maintenance 9

OPERATION TIPS

Operation tips 11

TROUBLESHOOTING TIPS

Troubleshooting tips 13

⚠ CAUTION

- Contact the authorized installer for installation of this unit.
- Contact an authorized service technician for repair or maintenance of this unit.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by persons responsible for their safety.
- Young children should be supervised to ensure that they do not play with the air conditioner.
- Installation work must be performed in accordance with national or local wiring standards by authorized personnel only.

To prevent injury to the user or other people and property damage, the following instructions must be followed. Incorrect operation due to ignoring of instructions may cause harm or damage. The seriousness is classified by the following indications.

⚠⚠WARNING	This symbol indicates the possibility of death or serious injury.
⚠ CAUTION	This symbol indicates the possibility of injury or damage to property.

■ Meanings of symbols used in this manual are as shown below.

	Never do this.
	Always do this.

⚠⚠WARNING

Always ensure effective grounding.

- No grounding may cause electric shock.

Do not operate or stop the unit by switching on or off the power.

- It may cause electric shock or fire due to heat generation.

Do not direct airflow directly at room occupants .

- This could cause health issues.

Disconnect the power if strange sounds, smell, or smoke comes from it.

- It may cause fire and electric shock.

Do not operate with wet hands or in damp environment.

- It may cause electric shock.

Always install circuit breaker and a dedicated power circuit.

- No installation may cause fire and electric shock.

Use the correctly rated breaker or fuse.

- There is risk of fire or electric shock.

Do not allow water to run into electric parts.

- It may cause failure of machine or electric shock.

Do not open the unit during operation.

- It may cause electric shock.

Ventilate room before operating air conditioner if there is a gas leakage from anotherappliance.

- It may cause explosion, fire and burns.

Never drink water drained from air conditioner.

- It contains contaminants and could make you sick.

Do not disassemble or modify unit.

- It may cause failure and electric shock.

⚠ CAUTION

⊘ When the air filter is to be removed, do not touch the metal parts of the unit.

- It may cause an injury.

⊘ Do not put objects like thin rods into the panel of blower and suction side.

- The high-speed fan inside may cause danger.

ⓘ Ensure proper ventalation, especially in rooms with a stove or other appliance

- An oxygen shortage may occur.

ⓘ Unit and circuit breaker/fuse must be switched off when cleaning.

- Do not clean unit when power is on as it may cause fire, electric shock or injury.

⊘ Do not put a pet or house plant where it will be exposed to direct air flow.

- This could injure the pet or plant.

⊘ Use only as intended.

- Do not use this air conditioner to preserve precision devices, food, pets, plants, and art objects. It may cause deterioration of quality, etc.

⊘ Use only a soft cloth to clean the unit.

- Cleaners or detergents may change the color or scratch the surface of the unit.

⊘ Do not place obstacles around air-inlets or inside of air-outlet.

- It may cause failure of appliance or accident.

ⓘ Turn off the main power switch when not using the unit for a long time.

- Not doing this may cause failure of product or fire.

Do not clean the indoor unit with water. Use only soft cloth or slightly damp cloth.

- Water may enter the unit and degrade the insulation. It may cause an electric shock.

ⓘ Periodically check the outdoor installation bracket for damage as necessary.

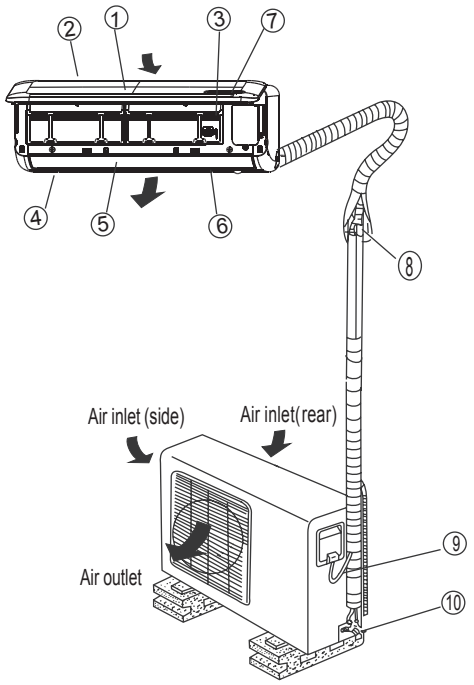
- Prolonged exposure to outdoor elements may cause damage to installation bracket causing unit to fall.

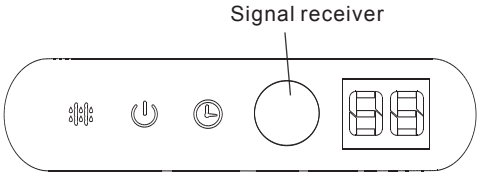
ⓘ Always insert the filters securely. Clean filter once every two weeks.

- Operation without filters may cause failure.

ⓘ Use caution when unpacking and installing. Sharp edges could cause injury.

ⓘ If water enters the unit, turn the unit off and disconnect the power , contact a qualified service technician.





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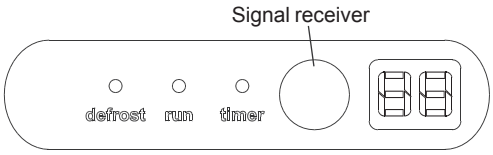

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Indoor unit

1. Front panel
2. Air inlet
3. Air filter
4. Air outlet
5. Horizontal air flow grill
6. Vertical air flow louver (inside)
7. Display panel

NOTE: The actual shape of the indoor unit you purchased may be slightly different on front panel and display window.

Outdoor unit

8. Connecting pipe
9. Connecting cable
10. Stop valve

NOTE:

All the pictures in this manual are for explanation purposes only. Your air conditioner may be slightly different. The actual shape shall prevail.

VLED Display Window

OPERATION indication lamp
This lamp illuminates when the air conditioner is in operation.

TIMER indication lamp
Lights up during Timer operation.

DEFROST indication lamp
(Enabled on cooling & heating models only): Lights up when the air conditioner starts defrosting automatically or when the warm air control feature is activated in heating operation.

Temperature indicator
- Displays the temperature settings when the air conditioner is operational.
- Displays the malfunction code.

Model Name And Dimensions

MODEL	WIDTH (mm)	HEIGHT (mm)	DEPTH (mm)
9000 Btu	26.8" (680 mm)	10.1" (255 mm)	7.1" (180 mm)
12000 Btu	30.2" (770 mm)	10.1" (255 mm)	7.5" (188 mm)
18000 Btu	35.7" (905 mm)	10.8" (275 mm)	7.8" (198 mm)
22000 Btu	40.6" (1030 mm)	12.5" (315 mm)	8.7" (220 mm)

Special functions

Refrigerant Leakage Detection
With this new technology, the display area will appear 'EC' and the indication lamps continue flashing when the outdoor unit detects refrigerant leakage.

Louver Angle Memory Function (optional):
Within the scope of safety angle, it will memorize the open angle of the horizontal louver. If it is exceeded, it will memorize the boundry of safety angle. In the following circumstances, it will return to standard angle: 1) pressing the turbo or manual control button.
So we strongly suggest that the open angle of the horizontal louver should not be set too small, in case the condensed water forms and drops from the horizontal louver.

SELF CLEAN function (optional)

- Function used after the Shut Down of cooling operation to clean the Evaporator and keep it as fresh for the next operation.
- The unit will operate as follows: "FAN ONLY" mode at Low fan speed--Heating operation with "LOW" fan speed (applicable to cooling & heating models only) ---"FAN ONLY" operation--Stop Operation---Turn off.

Note:

- This function is only available under "COOL" ("AUTO COOL", "FORCED COOL") and "DRY" mode.
- Before selecting the function, it is recommended to run the air conditioner under Cooling operation for about half an hour. Once the Self Clean function is activated, all "TIMER" settings will be cancelled.
- During Self Clean operation, when the "SELF CLEAN" button is pressed on the remote control again it will stop the operation and turn off the unit automatically.

CLEAN AIR function (on some models)
Improving the quality of indoor air is one of the purposes of an air conditioner. This air conditioner is equipped with an ionizer or Plasma Dust Collector (depending on specific configuration of the model). With the ions generated by the Ionizer, the air circulation of the air conditioner fills the room with refreshing, natural and healthy air. The Plasma Dust Collector generates a high voltage ionization zone, through which the air is converted to plasma. Inside the air most of the dust, smoke, and pollen particles are captured by the electrostatic filter.

Anti-mildew function (optional)
When turning off the uniton "COOL", "DRY", "AUTO" (Cool) mode, the air conditioner will continue operating for about 7-10 minutes (depending on models) with soft wind. This will help to dry up the condensed water inside the evaporator, and prevent the breeding of mildew.
Under Anti-mildew operation, do not restart the air conditioner until the unit is completely off.

NOTE: This manual does not include Remote Control Operations, see the <<Remote Control Instruction>> packed with the unit for details.

Operating temperature

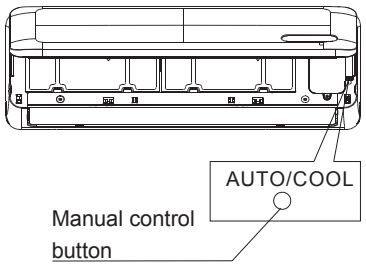
Mode / Temperature	Cooling operation	Heating operation	Drying operation
Room temperature	⩾62ºF(17ºC)	⩽86ºF(30ºC)	＞50ºF(10ºC)
Outdoor temperature	32ºF~122ºF (0ºC~50ºC)	5ºF~86ºF (-15ºC~30ºC)	32ºF~122ºF (0ºC~50ºC)
	(5ºF~122ºF/-15ºC~50ºC For the models with low temperature cooling system)		

NOTE:

1. Optimum performance will be achieved within these operating temperatures. If air conditioner is used outside of the above conditions, certain safety protection features might come into operation and cause the unit to function abnormally.
2. Room relative humidity less than 80%. If the air conditioner operates in excess of this figure, the surface of the air conditioner may attract condensation. Please set the vertical air flow louver to its maximum angle (vertically to the floor), and set HIGH fan mode.

Manual operation

Manual operation can be used temporarily in case the remote control is disabled or the unit requires maintenance.



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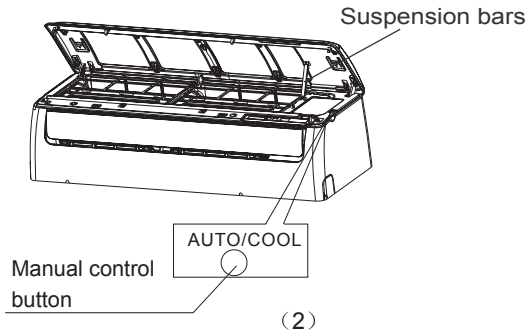

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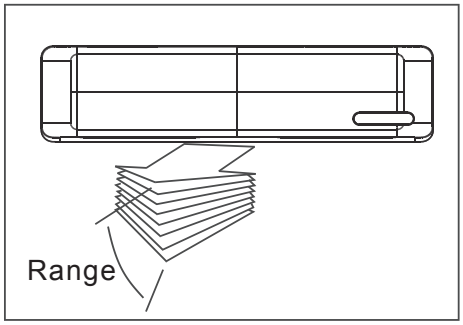
NOTE: The unit must be turned off before operating the manual control button. If the unit is operational, continue pressing the manual control button until the unit is off.

① Open and lift the front panel up to an angle until it remains fixed with a clicking sound.
② For 22K Btu model, please use suspension bars to prop up the panel.
③ One press of the manual control button will lead to the forced “AUTO” operation. If you press the button twice within five seconds, the unit will operate under forced “COOL” operation. Close the panel firmly to its original position.

CAUTION:

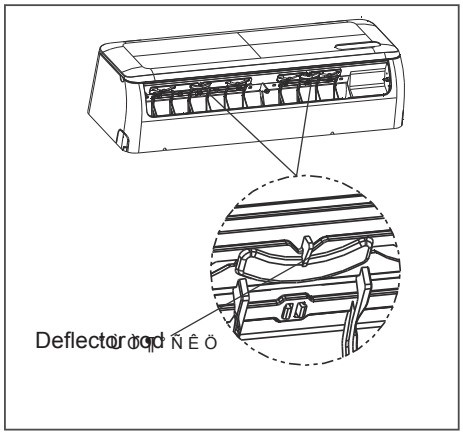
- This button is used for testing purposes only. You should not choose it.
- To restore the remote control operation, use the remote control directly.

Airflow direction control



Adjust the air flow direction properly otherwise it may cause discomfort or cause uneven room temperatures.
Adjust the horizontal louver using the remote control.
Adjust the vertical louver manually.

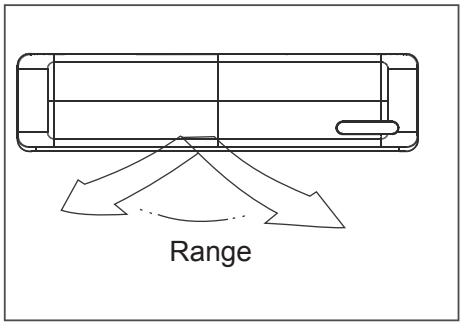
To set the vertical air flow (Up--Down) direction
Perform this function while the unit is in operation. Use the remote control to adjust the air flow direction. The horizontal louver can be moved at a range of 6º for each press, or swing up and down automatically. Please refer to the ''REMOTE CONTROL OPERATION MANUAL'' for details.



To set the horizontal air flow direction (left - right)

- Move the deflector rod manually to adjust the air flow in the direction you prefer.

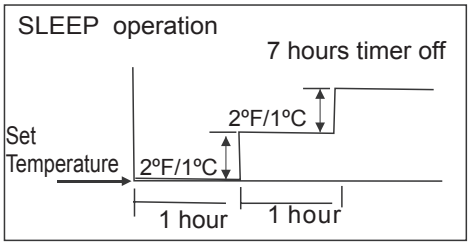
IMPORTANT: Do not put your fingers into the panel of blower and suction side. The high-speed fan inside may cause danger.



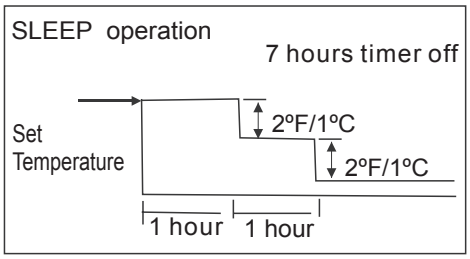
⚠ CAUTION

- Do not operate the air conditioner for long periods with the air flow direction set downward in cooling or dehumidifying mode. Otherwise, condensation may occur on the surface of the horizontal louver causing moisture to drop on to the floor or on furnishings.
- When the air conditioner is started immediately after it was stopped, the horizontal louver might not move for approximately 10 seconds.
- Open angle of the horizontal louver should not be set too small, as COOLING or HEATING performance may be impaired due to too restricted air flow area.
- Do not move the horizontal louver manually, otherwise the horizontal louver will be out of sync. Please cease operating. Turn off power supply, wait 10 seconds, then turn back on power supply. Then restart the air conditioner.
- Do not operate unit with horizontal louver in closed position.

How the air conditioner works



Cooling



Heating

AUTO operation

- When you set the air conditioner in “AUTO” mode, it will automatically select cooling, heating (cooling/heating models only), or fan only operation depending on set temperature and the room temperature.
- The air conditioner will control room temperature automatically to the temperature point you set.
- If you feel uncomfortable in the “AUTO” mode, you can set your desired temperature.

SLEEP operation

When you push “SLEEP” button on remote control during cooling, heating (cooling & heating models only), or “AUTO” operation, the air conditioner will automatically increase (cooling) or decrease (heating) 2ºF/1ºC per hour for the first 2 hours, then hold steadily for the next 5 hours, after that it will switch off. This mode saves you energy and brings you comfort at night.

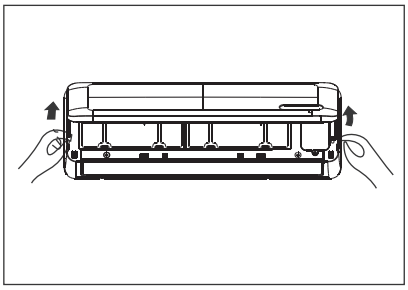
DRYING operation

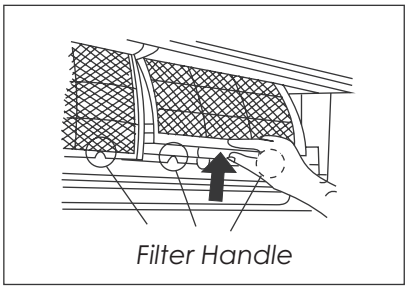
- The fan speed will be automatically controlled under dry operation.
- During the dry operation, if the room temperature is lower than 50ºF(10ºC) the compressor stops and won’t restart until the room temperature is above 54ºF(12ºC).

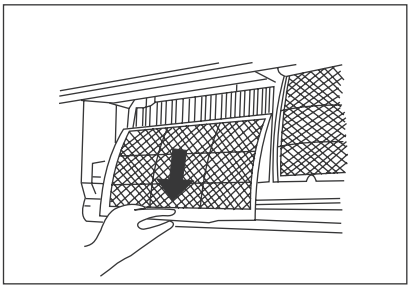
Optimal operation

- To achieve optimal performance, please note the following:
- Adjust the air flow direction correctly so that it is not directly blowing on people.
- Adjust the temperature to achieve the highest comfort level. Do not adjust the unit to excessive temperature levels.
- Close doors and windows on “COOL” or “HEAT” modes, or performance may be reduced.
- Use “TIMER ON” button on the remote control to select a time you want to start your air conditioner.
- Do not put any object near air inlet or air outlet, as the efficiency of the air conditioner may be reduced and the air conditioner may stop running.
- Clean the air filter every two weeks, otherwise cooling or heating performance may be reduced.
  Do not operate unit with horizontal louver in closed position.

Care and Maintenance







Cleaning the Grill, Case and Remote Control

- Turn the system off before cleaning. To clean, wipe with a soft, dry cloth. Do not use bleach or abrasives.

NOTE: Power supply must be disconnectd before cleaning the indoor unit.

⚠ CAUTIONS

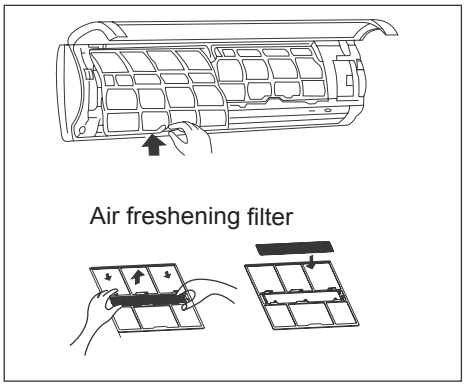
- A cloth dampened with cold water may be used on the indoor unit if it is very dirty. Then wipe it with a dry cloth.
- Do not use a chemically treated cloth or duster to clean the unit.
- Do not use benzine, thinner, polishing powder, or similar solvents for cleaning. These may cause the plastic surface to crack or deform.
- Never use water hotter than 104ºF/40ºC to clean the front panel, it could cause deformation or discoloration.

Cleaning the air filter

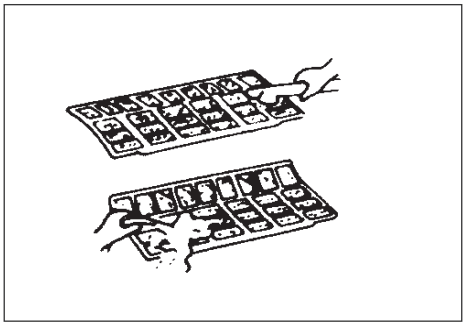
NOTE: Power supply must be disconnected before cleaning the indoor unit.

A clogged air filter reduces the cooling efficiency of this unit. Clean the filter once every 2 weeks.

1. Lift the indoor unit panel up to an angle until it stops with a clicking sound. For 22K Btu model, please use suspension bars to prop up the panel.
2. Take hold of the handle of the air filter and lift it up slightly to take it out from the filter holder, then pull it downwards.
3. Remove the AIR FILTER from the indoor unit. Clean the AIR FILTER once every two weeks. Clean the AIR FILTER with a vacuum cleaner or water, then dry it in a cool place.



4. Remove the Air Freshening Filter from its supporting frame (on some models).
   - Clean the air freshening filter at least once a month, and replace it every 4-5 months.
   - Clean it with a vacuum cleaner, then dry it in a cool place.
5. Install the air freshening filter back into position.
6. Insert the upper portion of air filter back into the unit, taking care that the left and right edges line up correctly and place filter into position.

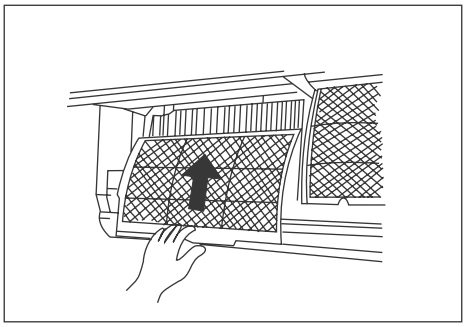


Maintenance

If you plan to idle the unit for a long time, perform the following:

(1) Clean the indoor unit and filters.
(2) Operate the fan for about half a day to dry the inside of the unit.
(3) Stop the air conditioner and disconnect power.
(4) Remove the batteries from the remote control.

The outdoor unit requires periodic maintenance and cleaning. Do not attempt to do this yourself. Contact your dealer or service provider.



Check before operation

- Clean the indoor unit and filters.
- Check that the air filter is installed.
- Check if the air outlet or inlet is blocked after the air conditioner has not been used for a long time.

⚠ Caution

- Do not touch the metal parts of the unit when removing the filter. Injuries can occur when handling sharp metal edges.
- Do not use water to clean inside the air conditioner. Exposure to water can destroy the insulation, leading to possible electric shock.
- When cleaning the unit, first make sure that the power and circuit breaker are turned off.
- Do not wash with hot water at more than 104ºF Shake off moisture completely and dry it in the shade; do not expose it directly to the sun. The filter may shrink.

OPERATION TIPS

The following events may occur during normal operation.

1. **Protection of the air conditioner.**

   Compressor protection

   - The compressor can't restart for 3 minutes after it stops.

   Anti-cold air (Cooling and heating models only)

   - The unit is designed not to blow cold air in “HEAT” mode, when the indoor heat exchanger is in one of the following three situations and the set temperature has not been reached.
     A) When heating has just started.
     B) Defrosting is occurring.
     C) Low temperature heating is occuring.
   - The indoor or outdoor fan stop running when defrosting (Cooling and heating models only).

   Defrosting (Cooling and heating models only)

   - Frost may be generated on the outdoor unit during heat cycle when outdoor temperature is low and humidity is high resulting in lower heating efficiency of the air conditioner.
   - During this condition air conditioner will stop heating operation and start defrosting automatically.
   - The time to defrost may vary from 4 to 10 minutes according to the outdoor temperature and the amount of frost built up on the outdoor unit.

2. **A white mist coming out from the indoor unit**
   - A white mist may generate due to a large temperature difference between air inlet and air outlet in “COOL”mode in an indoor environment that has a high relative humidity.
   - A white mist may be generated due to moisture generated from defrosting process when the air conditioner restarts in “HEAT”mode operation after defrosting.

3. **Low noise of the air conditioner**
   - You may hear a low hissing sound when the compressor is running or has just stopped running. It is the sound of the refrigerant flowing or coming to a stop.
   - You can also hear a low "squeak" sound when the compressor is running or has just stopped running. This is caused by heat expansion and cold contraction of the plastic parts in the unit when the temperature is changing.
   - A noise may be heard due to louver restoring to its original position when power is turned on.

4. **Dust is blown out from the indoor unit.**
   This is a normal condition when the air conditioner has not been used for a long time or during first use of the unit.

5. **A peculiar smell comes out from the indoor unit.**
   This is caused by the indoor unit giving off smells permeated from building material, from furniture, or smoke.

6. **The air conditioner turns to “FAN” only mode from “COOL” or “HEAT” (For cooling and heating models only) mode.**
   When indoor temperature reaches the temperature setting on air conditioner, the compressor will stop automatically, and the air conditioner turns to “FAN” only mode. The compressor will start again when the indoor temperature rises on “COOL” mode or falls on “HEAT” mode (For cooling and heating models only) to the set point.

7. **The air conditioner runs Anti-mildew function after turning off the unit.**
   When turning off the unit under “COOL” (”AUTO COOL”, “FORCED COOL”) and “DRY” mode, the air conditioner will run Anti-mildew function for 7-10 minutes, then stop the operation and turn off the unit automatically.

8. Dripping water may generate on the surface of the indoor unit when cooling in a high relative humidity (relative humidity higher than 80%). Adjust the horizontal louver to the maximum air outlet position and select HIGH fan speed.

9. **Heating mode (For cooling and heating models only)**
   The air conditioner draws in heat from the outdoor unit and releases it via the indoor unit during heating operation. When the outdoor temperature falls, heat drawn in by the air conditioner decreases accordingly. At the same time, heat loading of the air conditioner increases due to larger difference between indoor and outdoor temperature. If a comfortable temperature can't be achieved by the air conditioner, we suggest you use a supplementary heating device.

10. **Auto-restart function**
   - Power failure during operation will stop the unit completely.
   - For the unit without Auto-restart feature, when the power restores, the OPERATION indicator on the indoor unit starts flashing. To restart the operation, push the “ON/OFF” button on the remote control. For the unit with Auto-restart feature, when the power restores, the unit restarts automatically with all the previous settings preserved by the memory function.

11. Lightning or a wireless telephone operating nearby may cause the unit to malfunction. Disconnect the unit with power and then re-connect the unit with power again. Push the ON/OFF button on the remote control to restart operation.

Troubleshooting Tips

If one of the following faults occurs, stop the air conditioner immediately, disconnect the power and then connect it in again. If the problem still exists, disconnect the power and contact the nearest authorized customer service center.	
Trouble	OPERATION indicator or other indicators continue flashing.
	Fuse blows frequently or circuit breaker trips frequently.
	Other objects or water fall into the air conditioner.
	The remote control won't work or works abnormally .
	If one of the following code appears on the display area : E0,E1,E2,E3.....or P0,P1,P2,P3.....

Malfunctions	Cause	What should be done?
Unit does not start	Power outage.	Wait for power to be restored.
	Fuse may have blown or a circuit breaker has been tripped.	Replace the fuse or flip the circuit breaker.
	Battery in remote control may have been exhausted.	Replace the battery.
	The time you have set with timer is incorrect.	Wait or cancel timer setting.
Unit not cooling or heating (Cooling/heating models only) room very well while air flowing out from the air conditioner	Inappropriate temperature setting.	Set temperature correctly. For detailed method please refer to "Using remote control" section.
	Air filter is blocked.	Clean the air filter.
	Doors or windows are open.	Close the doors or windows.
	Air inlet or outlet of indoor or outdoor unit has been blocked.	Turn off unit. Clear obstructions away first, then restart the unit.
	Compressor time delay has been activated.	Wait approximately 3 minutes for compressor to turn on and the unit to begin cooling/heating.
If issue has not been corrected, please contact a local authorized dealer or the nearest customer service center. Be prepared to provide detailed malfunctions and unit model.		

Notes: Do not attempt to repair the unit yourself.
Always consult an authorized service provider.

The design and specifications are subject to change without prior notice for product improvement. Consult with the sales agency or manufacturer for details.

Your Source for Home Comfort

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Specifications and performance data is subject to change without notice.

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